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Chairman Lincoln, Ranking Member Chambliss and members of the Committee, my name is Margaret Bogle from Little Rock, AR. I want to thank you for this opportunity to come before you today to discuss "Reauthorization of U.S. Child Nutrition Programs: Opportunities to Fight Hunger and Improve Child Health". I hope that by relating my experiences in the Lower Mississippi Delta of Arkansas, Louisiana and Mississippi working with families, rural communities, and schools, public and not for profit agencies, will enhance your discussion of USDA Child Nutrition programs as part of the solution to improving child health, food insecurity and childhood obesity issues. These are complex issues which will require innovative efforts of our government working in collaboration with individual citizens, families, communities, farmers, food processors and manufacturers, and educational institutions at all levels.

My goal is to set the stage with an introduction to the nature of good nutrition and healthy lifestyles for families and children, so that the rest of the panel can present their views of the role of policy changes, child advocacy and recommendations for the reauthorization of the child nutrition programs. The Administration, through the efforts of the White House, USDA, and the Department of Health and Human Services (HHS), has been working to address childhood obesity. In recent months, the Secretary of Agriculture Tom Vilsack and First Lady of the United States, Michelle Obama, have taken a leadership role with the example and message of healthy eating as it relates to health and well being of our children and young people. The First Lady's White House garden, the People's Garden at USDA, and the joint USDA-White House effort to promote the Healthier U.S. Schools Challenge clearly show that our senior leadership understands the importance of healthy eating and physical activity for children and has made it a priority. Further, since 1980, USDA and HHS have jointly published the Dietary Guidelines for Americans, which serve as the basis of federal nutrition policy and programs.

Current statistics indicate continuing concern, not the least of which is that almost one-third of our children are overweight or obese. Research has shown that obese children are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. In addition, obese children have much greater risks of becoming overweight or obese adults than those children who maintain healthy weight patterns (and overweight and obesity in adulthood increases the risk of various chronic diseases such as hypertension, diabetes, cardiovascular diseases, and cancer). Children who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems such as stigmatization and poor self-esteem. Indeed, the psychological stress of social stigmatization can cause low self-esteem, which, in turn, can hinder academic and social functioning, and persist into adulthood.

At the other end of the spectrum is whether or not children are getting enough to eat. Food insecurity studies indicate that in households with children approximately 15.8 percent (approximately 6 million families) were food insecure at some time during the year. This statistic is especially critical in that we know that children in food insecure households have increased risk of health and developmental problems as compared with children in food secure households. Several characteristics of these children are alarming: higher hospitalization rates of young children, more anxiety and depression in school age children, lower math achievement in kindergarteners, lower arithmetic scores and higher likelihood of repeating a grade for children 6-11, higher numbers of chronic health conditions in children, etc. The link between childhood overweight status and food insecurity remains an unexplained paradox. Studies have found conflicting results as to whether food insecurity (or not having enough to eat at times during the year) leads to overweight and obesity in children, but there are patterns and associations that cause us to know we need more research in this area.

Research has also shown that children who do not eat breakfast have lower scores in school, more tardiness and increased rates of absenteeism than their counterparts who do eat breakfast, again showing that the school breakfast program makes a contribution not only to the health of the children, but also makes it possible for them to take advantage of the education provided at school. All children should be encouraged to eat breakfast. Children who get a healthy breakfast are less likely to be overweight.

The child nutrition programs we are discussing today have the potential to impact 31 million school children and thereby improve access to healthy, nutritious foods during the school day.

This leaves some gaps that others on this panel will discuss such as what do these school kids do on weekends and during the summer?

How do we approach solutions to these complex problems that must be solved and cannot continue to increase?

Recent reports from the Institute of Medicine, the American Academy of Pediatrics and the Robert Wood Johnson Foundation have recognized that "environmental factors affect individual behaviors related to food and physical activity. In many communities, for example, fresh produce is not available or affordable, streets and parks are not amenable to exercise, and policies and economic choices make fast food cheaper and more convenient than healthier alternatives. Communities have made efforts to improve these factors in diverse settings and with diverse populations, resulting in many promising approaches." (IOM Report October, 2009)

I have been involved in human nutrition intervention research in the Lower Mississippi Delta of Arkansas, Louisiana and Mississippi for the past twelve years. This research is a component of ongoing research endeavors of USDA, Agricultural Research Service collaborating with scientists in a tri-state region to improve the health of at-risk, rural populations in the Lower Mississippi Delta. ARS is coordinating and conducting research with the 1890 Land Grant Universities (AR: The University of Arkansas at Pine Bluff; LA: Southern University and A & M College in Baton Rouge; and MS: Alcorn State University, Lorman) and an additional university in each state (AR: Arkansas Children's Hospital Research Institute, University of Arkansas for Medical Sciences in Little Rock; LA: Pennington Biomedical Research Center, Louisiana State University, Baton Rouge; and MS: The University of Southern Mississippi at Hattiesburg.) The prevalence of many nutrition related health problems is greater for minority, rural, low socioeconomic, and some ethnic groups which have led to the designation of "at-risk" populations. Rarely are these pockets of at-risk populations sampled in national surveys and may be overlooked for national food, nutrition and health assistance policies and programs.

The lower Mississippi Delta (LMD) region of AR (also LA and MS) is comprised primarily of rural communities, high minority population, with high rates of poverty, low educational attainment, obesity, hypertension, and other nutrition-related chronic diseases. The rates of nutrition related chronic diseases, especially obesity, are higher in the Delta areas than in the rest of the three states. The LMD is one of the regions of the US which clearly exemplifies the designation of "atrisk" and has great potential for ARS to study the effects of nutrition and health strategies related to improving the lifestyle and the prevention of obesity. The ability of ARS to engage in

long-term research is particularly appropriate for this program component, and the idea of targeted populations of particular nutritional vulnerability complements specific components of the ARS National Human Nutrition program.

Intervention strategies to prevent obesity have been difficult to implement in these areas because of major environmental problems, limited accessibility to high quality food, poor financial resources, lack of protected areas for physical activity, and overall reluctance of communities to participate in research. The Lower Mississippi Delta consortium has worked in conjunction with multiple communities in the planning, implementation, data collection and evaluation for a 6-month nutrition and physical activity intervention for adults in Arkansas and Mississippi. Results included significant health improvements in waist circumference, blood pressure, and HDL-C with participants increasing minutes walked per day. In one of these communities I participated recently in a "Longitudinal Award Ceremony" where after three years there were approximately 30 African American women still participating in walking and 'watching what they ate". Some had significant weight losses (30 plus pounds off over time) and were still maintaining the weight loss. Perhaps even more importantly, the menu for the luncheon was comprised of healthy foods. This menu has changed in the last 3 to 4 years. My point is that these rural communities are committed to improving the health and lifestyle of their residents. This same community had refurbished a walking trail to make it safe for the participants to walk. Interventions like these serve as possible solutions to alleviate the escalating number of healthcare cases in the US Delta region that are associated with nutrition-related chronic diseases and contribute to excessively high health care costs.

We know that in the Delta as in much of the rest of the US, children and their families are not following the US Dietary Guidelines for Americans which are positioned to provide recommendations for a healthier lifestyle. As compared to the recommendations they are eating:

- fewer servings of fruits and vegetables (with the dark green and orange vegetables eaten less);
- more refined grains and fewer whole grains
- more high fat dairy and high fat meats
- more discretionary calories especially sugar

Many children in the Delta have not experienced a wide variety of fruits and vegetables and are less likely to eat new fruits and vegetables when seen for the first time. An ARS scientist has developed a method for determining the willingness of elementary children to try fresh fruits and vegetables. The good news from her research is that repeated exposure to fruits and vegetables during snacks or at mealtimes can increase the consumption of these healthy foods over time. This research team is now involved in determining if a "Tool Kit' of recipes, menus, food preparation tips and techniques, etc. will increase adherence to the Dietary Guidelines in these rural communities.

Scientists in the Delta Obesity Prevention Research Unit consortium are searching for ways to improve the lifestyle (food and physical activity) for African American college students with the goal of developing a course that all entering freshmen would take. Other consortium members are testing whether social support groups and instruction on the Dietary Guidelines help mothers and women's groups influence their families to eat better, and still another group is looking at school gardens as a tool for increasing social bonding in middle school students to determine if they will consume more fruits and vegetables that they grow and how will the physical activity of gardening assist in preventing obesity or maintaining a healthy weight.

The food choices individuals make determine the quality of their diet, but for many US Delta residents, these choices are directly impacted by poverty and food insecurity, as well as access to food stores that maintain adequate supply and variety. Scientists in this Consortium have developed and tested a regional food store survey to determine food availability and quality in supermarkets, small/medium stores, and convenience stores in the lower Mississippi Delta region. The research team discovered that supermarkets carried a large percentage of the food items surveyed and that the overall food quality was better; however, the number of supermarkets in this rural region was few and distant (more than 30 miles) to many communities. Community residents with limited transportation are likely to experience limited food supply, as small/medium and convenience stores carried more limited food selections. The impact of this research is that in order for scientists and communities to conduct nutrition intervention research to improve food quality and prevent obesity in the rural Delta, they need to improve access to healthy foods. They may have to partner with small/medium food stores, investigate community gardening, 'Rolling Stores", or food co-ops, assist in the establishment of farmer's markets, or develop and improve other environmental issues to impact resident's food choices and diet quality.

These examples are intended to show the breadth of the problem as well as suggest some solutions that are working and some that are still being tested. At least the consumers and communities are beginning to become involved in being part of the solution.

I thank the Committee for the opportunity to appear before you today to discuss the reauthorization of child nutrition programs, and I look forward to answering any questions that you may have.